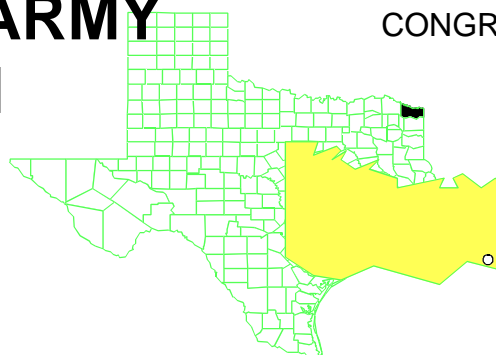


# LONE STAR ARMY AMMUNITION PLANT TEXAS

EPA ID# TX7213821831



**EPA REGION 6**  
CONGRESSIONAL DISTRICT  
01  
Bowie County

Updated: 05/05/00

## Site Description

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- Location:** ! The Site is located in Bowie County, approximately 12 miles west of Texarkana.
- Population:** ! The Site is located in a sparsely populated, rural area.
- Setting:**
- ! Old demolition grounds cover approximately 19 acres.
  - ! The Site was used for disposal of explosives by detonation.
  - ! Elevated levels of explosives and heavy metals are found in soils and groundwater.
  - ! Heavy metals have been detected in ground water.
  - ! Domestic water wells located outside northern and southern boundaries.
- Hydrogeology:**
- ! The installation is situated on a ridge, causing drainage to the north and south.
  - ! The ground water table is shallow, and drainage is to nearest creek.
  - ! The old demolition grounds are 800 feet from East Fork Elliot Creek.
  - ! Contamination has been indicated in creek.

## Wastes and Volumes

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The principal pollutants at the plant are Tetryl (an explosive) in the soil at concentrations up to 6 parts per million (ppm), and mercury (7.4 parts per billion, or ppb), chromium (537 ppb), and lead (770 ppb) in the ground water beneath the Site.

! No documentation exists for estimation of waste volumes.

## Site Assessment and Ranking

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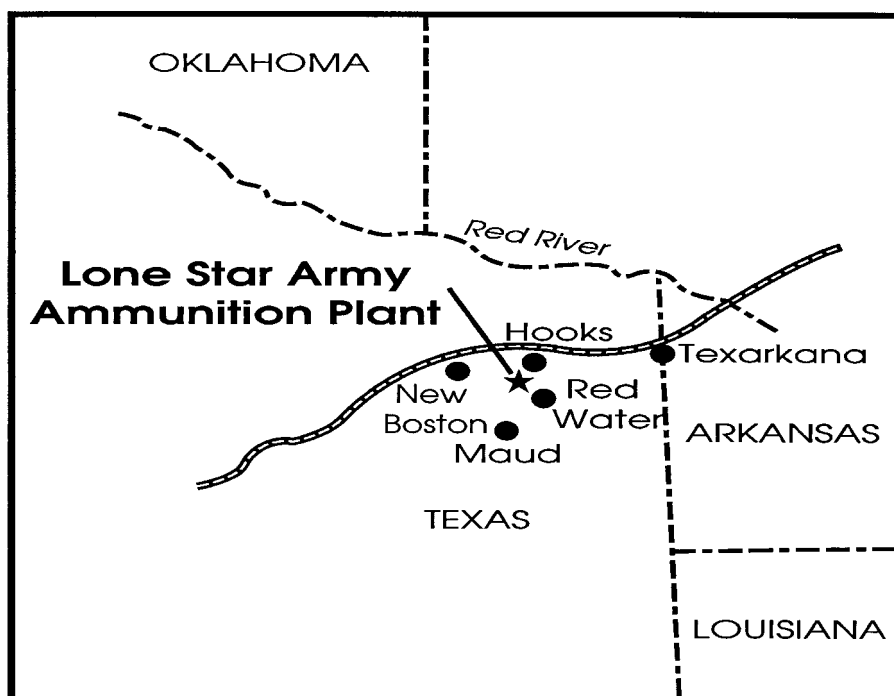
### NPL LISTING HISTORY

Site HRS Score: 31.85  
Proposed Date: 10/01/84  
Final Date: 7/22/87  
NPL Update: No. 2

! The U.S. Army contested the HRS score based on new sampling results indicating lower concentrations of contaminants. ! The EPA noted that the MITRE (Site assessment) model does not reflect concentrations, and did not re-score the Site.

## Site Map and Diagram

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## The Remediation Process

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### Site History:

- ! The Site is owned by the U.S. Army and operated by Day and Zimmerman, Inc.
- ! The plant began operations in 1942.
- ! Industrial operations include loading, assembling, and packaging of munitions components.

### **Health Considerations:**

! The contaminants of concern include explosives and heavy metals which have been detected in the soils and groundwater. No contaminants of concern have migrated off-base. Potential toxicity risks exists for Base employees via ingestion through direct contact with contaminated soils and groundwater. Safety risks exist via exposure to unexploded ordnance making excavation infeasible. Human health risk minimization efforts under investigation by the Army are containment oriented. Off-Site, several domestic wells located nearby.

### **Other Environmental Risks:**

! The East Fork Elliot Creek drains into Wright Patman Lake, a major recreational lake.

## **Record of Decision (ROD)**

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ROD Signed: August 31, 1999

! The Remedial Investigation/Feasibility Study (RI/FS) Phase for the ODA was finalized in December 1997.

! The Focused Feasibility Study for the ODA was finalized in March 1998.

! The Proposed Plan was finalized in May 1998.

### **THE SELECTED REMEDY:**

The components of this ROD include:

- ! clearing exposed surficial source materials;
- ! regrading, leveling, and placing a soil cover over the ODA;
- ! constructing erosion control berms along the northern and eastern ODA perimeters;
- ! revegetating the soil cover and the berms;
- ! periodic inspection and maintenance of the soil cover and the berms;
- ! installing additional monitor wells;
- ! performing ground water and surface water monitoring;
- ! implementing land use restrictions, access restrictions, posting warning signs, and restrictions on the extraction and use of ground water from the study area;
- ! evaluating the effectiveness of the selected remedy every five years.

The estimated cost for the selected remedy is \$1,664,650. The cost estimate includes periodic inspection and operation and maintenance.

Selection of the source containment remedy for the ODA is based on continued Army control of the LSAAP, and therefore, limited public access; land use at LSAAP remaining commercial and/or industrial; and the land remaining in control of the Army until LSAAP is closed completely (no partial transfers of land). EPA, TNRCC, and the Army agreed that should any of the listed conditions change, the ROD would be re-opened and the ODA risk assessment would be re-

evaluated for appropriate receptors. Therefore, the selected remedy is protective of human health, welfare, and the environment, complies with the Federal and State requirements that are legally applicable or relevant and appropriate to the remedial action, and is cost effective.

## Community Involvement

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! Community Involvement for this Federal Facility Site is the responsibility of the U.S. Army. The RI, FFS, Proposed Plan and ROD for the LSAAP ODA were released to the public in January 1997, March 1998, May 1998, and September 19, 1999, respectively. These documents are available to the public in the administrative record at LSAAP and at information repositories maintained at the Texarkana Public Library and Maud Public Library.

! Number of Citizens on EPA mailing list: 30

! Site Repository: Texarkana Public Library

## Technical Assistance Grant

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! Letters of Intent Received: None

! Discussions were held with all Federal Facilities regarding formation of Site Specific Advisory Boards (SSABs) in lieu of awarding Technical Assistance Grants.

## Contacts

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! **Remedial Project Manager (EPA):** Earl Hendrick, (214) 665-8519, Mail Code: 6SF-AP

! **State Contact:** (TNRCC) Alan Etheredge, (512) 239-2139, Mail Code 143

! **Attorney (EPA):** Mike Barra, (214) 665-2143, Mail Code: 6SF-DL

! **State Coordinator (EPA):** Karen A. Bond, (214) 665-6682, Mail Code: 6SF-AP

! **Military Contact:** Roderick Sewell, LSAPP, (903) 334-1328

## Present Status and Issues

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! After adding the Lone Star Army Ammunition Plant Site to the National Priorities List (NPL), the EPA assessed Site conditions and determined that no other immediate actions currently are necessary to protect public health and the environment.

! During 1993 and 1994, it was determined that there exists an additional lower aquifer.

An additional investigation began in summer 1995 to determine the nature and extent of contamination and is ongoing. The Final Sampling and Analysis Plan was submitted to EPA on April 26, 1996, reviewed, and approved with comments.

! The Remedial Investigation /Risk Assessment (RI/RA) Report was submitted to EPA on March 18, 1997. EPA concurred on the Final RI/RA Report in January 1998.

! The Army submitted the Draft Focused Feasibility Study (FFS) for the ODA to EPA on December 30, 1997. The Draft FFS proposes a Presumptive Remedy for Municipal/Military Landfills which utilizes containment technologies including landfill cover system, erosion control measures, institutional controls, and groundwater monitoring.

! Finalization of the RI/FS Phase was accomplished in December 1997.

! The Focused Feasibility Study was finalized in April 1998.

- ! The Proposed Plan was finalized in June 1998.
- ! A Public Meeting addressing the Proposed Plan for the ODA was held on July 7, 1998. The Public Comment Period extended from June 25, 1998 through August 7, 1998.
- ! The Army submitted a Draft ROD to EPA and TNRCC on September 22, 1998.
- ! The final ROD for the ODA was signed by the EPA Region 6 Administrator on August 31, 1999.
- ! The facility Commander has signed the Installation Action Plans. This provides funds for the RD.

## Benefits

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! The 19-acre ODA lies within a surface water drainage basin of approximately 360 acres. Two intermittent drainages are located down-gradient of the ODA and discharges to the confluence with East Fork Elliot Creek. East Fork Elliot Creek flows in a southerly direction for approximately 1.2 miles before exiting LSAAP; then flows 3.9 miles to the confluence with Wright Patman Lake (a recreational lake), about 5 miles south of the ODA.

The selected remedy will eliminate direct dermal exposure to source material, provide soil erosion control to prevent future surficial exposure of source materials, and minimize infiltration and resulting leaching of source material chemicals to groundwater.

! The integrity of the selected remedy is safe guarded by the performance of continuous maintenance, installation of additional monitoring wells, and performing groundwater and surface water monitoring. The re-use of the ODA is its continued incorporation as restricted public access Army controlled property. A change in current use or transferring the property outside of military control will trigger a re-evaluation of risk and remedial objectives.

! Formal evaluations of the effectiveness of the selected remedy will be performed at least every 5 years for as long as hazardous wastes continue to be contained on-Site.